

## What else needs to be done?

- ◆ Unbundling Requirements
- ◆ Business Requirements



## Unbundling

- ◆ Assumed stabilization and limited re-engineering
- ◆ Driven by a filed timeline
- ◆ Significant tuning and improved tracking for increased number of transactions
- ◆ Anticipated Requirements
  - ◆ Phase I (5/2001)
    - ◆ Year-round signup
    - ◆ Contract transfers
    - ◆ Additional storage options
  - ◆ Phase II (5/2002)
    - ◆ Allowing suppliers to bill our distribution charges, "Giving up the bill"

## Customer Care Initiatives

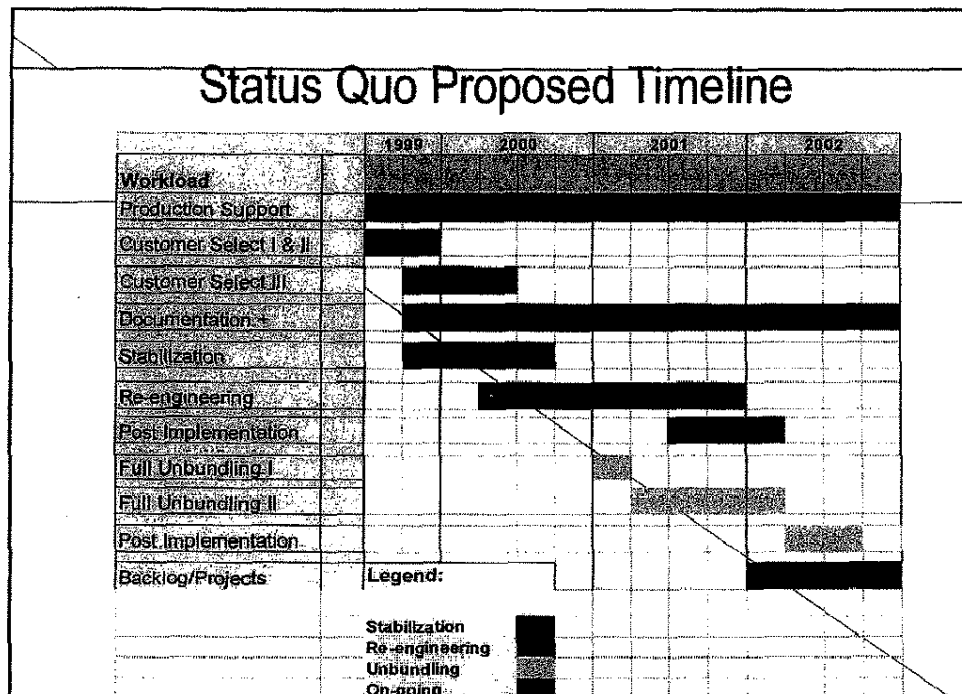
- ◆ Include projects that the Billing, Call Center, Meter Reading and Credit departments have defined in their business plans that would be prioritized by the clients based on resource and architectural constraints.
- ◆ Timeline indicates these can't be addressed until 2002



## Customer Care Planned Projects

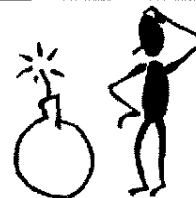
- ◆ User Friendly Access Screens
- ◆ E-commerce
- ◆ New Payment Methods
- ◆ Computer Telephony (CTI)
- ◆ Meter Reading Reroutes
- ◆ Bill Printing
- ◆ Guaranteed Appointments





## Technology Risks & Impacts

- ◆ **Biggest project we have ever undertaken**
- ◆ Timing is critical, scope must be controlled
- ◆ Need external project management help
- ◆ Availability/securing resources for Unisys environment



## Technology Risks & Impacts - con't

- ◆ Static technical architecture
- ◆ Not supported by external research & consultant findings
- ◆ No resources working on system replacement options
- ◆ Need significant business involvement



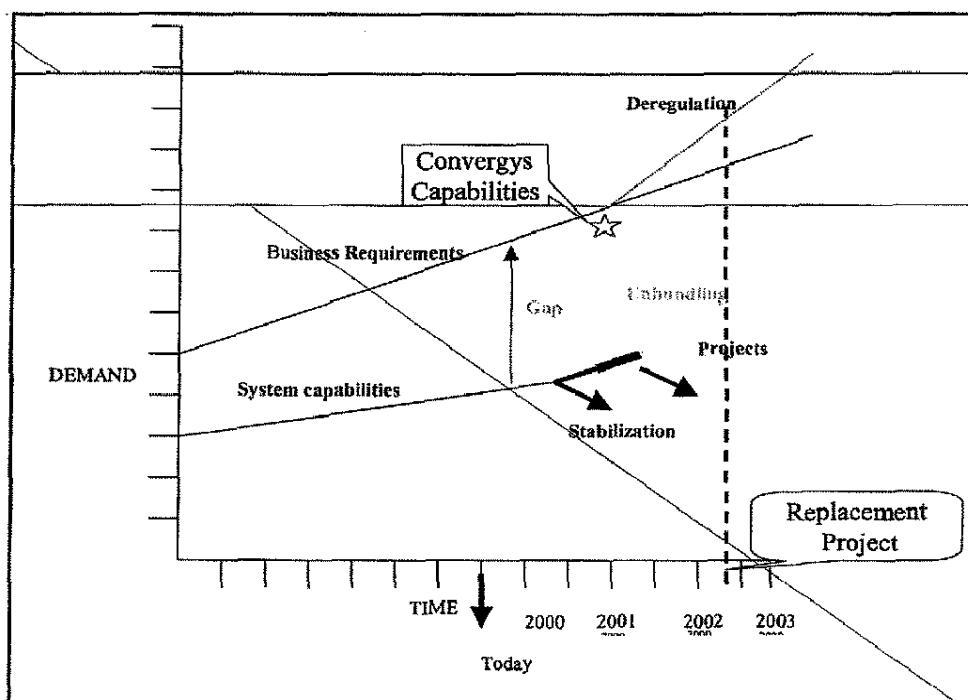
## Business Risks

- ◆ Unable to meet branding commitment impacts Nicor Energy success
- ◆ **Projects on hold for 2 years**
- ◆ Ability to meet customer expectations
- ◆ Ability to meet cost reduction measures

## Project Costs

	1999	2000	2001	2002	Total
OE	\$ 0.6	\$ 4.1	\$ 2.2	\$ 0.6	\$ 7.5
Capital	\$ 0.3	\$ 6.0	\$ 6.7	\$ 1.9	\$ 14.9
Total	\$ 0.9	\$ 10.1	\$ 8.9	\$ 2.5	\$ 22.4
EPS Impact	\$ 0.01	\$ 0.06	\$ 0.04	\$ 0.03	

Cost by phase	Cost	Duration	
		Average FTE's	in Quarters
Stabilization	\$ 1.6	7	4
Documentation	\$ 2.6	8	8
Re-engineer	\$ 6.4	15	8
Unbundle	\$ 2.4	6	6
Other	\$ 5.7		
Contingency	\$ 3.7		
Total	\$ 22.4		



## Next Steps

- ◆ Finish updating officers
- ◆ Comparison of alternatives
- ◆ Approval process

# MANAGEMENT REPORTS

## CUSTOMER ONE PROJECT

### Status Quo Scenario

September 20, 1999

#### I. Executive Summary

Since 1968, Nicor Gas has utilized a legacy customer information system (CIS) and billing system referred to as the Revenue Accounting (RA) system to support a major portion of the customer interfaces. For the last 5 years, several committees and outside consultants have studied these systems' ability to support the utility's activities related to billing customers under the deregulated model, as well as the need to split or consolidate bill components under the unbundled or open access model as anticipated in 2001.

Several options have been explored for addressing the need for a more flexible system architecture and a more stable production environment, including replacing, re-platforming and rewriting. Since October 1998, we have been evaluating three options for replacing the billing system.

- Purchasing a package and functionally migrating the billing system over to it.
- Outsourcing the billing production and application support to a service bureau.
- Maintaining the current legacy systems (RA and CIS) referred to as the "status quo".

At this point, there is a need to define what we mean by status quo using our current systems and describe the business and technical risks associated with taking this course. It is important to understand that both the business and technology strategies drive the customer information system requirements.

Under a status quo approach, we would continue to run our legacy system without significantly restructuring the data or application architecture. This means that we would increasingly be constrained by processes, data, and business rules that were implemented over the last 30 years.

- Changing requirements for business functionality would be implemented in the Cobol programs and tape master files, constrained by a complex code which is known to a few IS persons.
- End users are still highly dependent on programming to make any changes.
- Access to information will still be limited.

From the Customer Care organization perspective, status quo means that the next 1-2 years will be spent doing customer select, stabilization, and limited re-engineering. Although we have not finalized the scope of the stabilization and limited re-engineering projects, we believe that the teams will not be able to support functional enhancements such as bill printing, meter reading reroutes, CSR pop-up screens, etc.

Status quo is not supported by our research and the findings presented by consultants from the Meta Group.

#### II. Status Quo Defined

Status quo is considered to be a stopgap approach to supporting customer care. It assumes that the current system can operate at a minimal level for 3-5 years, with the first 1-2 years being spent addressing major technical concerns. Status Quo does not eliminate the need to replace the billing systems. It assumes that additional resources will be needed beginning in 2002 to begin the system replacement initiatives.

Status quo recognizes two technical issues that have impacted the IS department's ability to support the system as well as the Customer Care organizations' confidence in the daily operation of the system.

- **Limited re-engineering** describes the steps that must be taken to re-design the Cobol program functionality to effectively operate for the next 5 years. Since the teams had assumed, for the past several years, that a new CIS system foundation was going to be implemented, many of the application design decisions were "short cuts" or "scope reductions" that were to be addressed fully in the replacement system. This approach will give IT some additional flexibility to implement multiple projects rather than one change at a time.



- **Stabilization** describes a period of time when programming resources will work to analyze and correct business processes, bugs or anomalies which have occurred over the past few years that were not addressed, again under the assumption that a new CIS system foundation was going to be implemented.

Status quo recognizes the current and anticipated business functions that are demanded by the Customer Care objectives. These demands are incorporated into the proposed timeline as appropriate.

- **Customer Select** pilot functions have been built in a phased approach over the past two years will continue to be implemented on a schedule to complete these changes by May 2001.
- **Unbundling** functions which are currently being defined will be scheduled around the re-engineering and stabilization activities to optimize the business objectives while managing the technical risks.
- **Customer Care Initiatives** include projects that the Billing, Call Center, Meter Reading and Credit departments have defined in their business plans that would be prioritized by the clients based on resource and architectural constraints. Most of these will not be addressed until after unbundling.
- **Backlog of MISRs** that includes client requests for program changes that have been initiated by individual department needs or from the process review type of initiatives.

### III. Status Quo Conclusion

The team believes that there are risks associated with maintaining the systems at status quo, although we do not predict a major system failure, which would cause the current system to cease operation. These risks include:

#### Customer Care Impacts:

- Deepening project backlogs and increasing delays in deploying business functions due to application constraints.
  - e.g. Bill Print recommendations from 1998 still pending
- Increased volume of transactions driven by customer choice and exposure to external entities' (suppliers') demands.
  - Cancel/rebills, BI's, dialcards, etc. impact supplier billing.
- Limited ability to support new products and services that involve the call center and billing system supports.
  - E.g. ComfortGuard implementation is very inflexible.
- Restricted information access to legacy data needed for analysis.
  - Credit information = programming
- Inability to meet customer expectations

#### Regulatory Response Impacts:

- Increase in number and complexity of regulatory changes to be implemented in shortened time frames.
- No resources "available" for regulatory rate case.

#### Technical Support Impacts:

- IS resource recruiting and retention considering industry trends and availability of skilled Unisys/Cobol resources.
- Operating on a static technical architecture (Cobol code and tape master files running on a proprietary Unisys operating system) that is not designed to take advantage of newer technology.
  - E.g. IBM could not analyze our application code with their tool - Cobol 74 and Unisys.
- Maintaining an application architecture (complex programs with imbedded business rules and non-modular structure void of documentation) lacking in programming techniques and design principles that have been implemented during the past 30 years.
  - Not object-oriented; not table-driven/ embedded rules-based

Project Management Impacts:

- External consulting expertise needed to supplement and support Nicor skills.
  - Project is at least 3 times larger than FIS.

The team believes that the re-engineering and stabilization efforts are necessary to improve the current operation of the system in several areas:

- Lower the risk of programming anomalies;
- Stabilize the base foundation so that quality of new projects/programming, like Customer Select, will improve;
- Increase the programmers' flexibility and maintainability in complex program functions;
- Reduce the system constraints for programming anticipated business requirements.
- Improve accuracy

The team supports the need for a commitment to changing the way we manage our CIS and RA systems from both the business requirements and technical implementation aspects:

- Minimize the "short cut" approach to using quick fixes and trial-and-error system design
- Prioritize changes considering IS capabilities and the business time schedules
- Establish accountability for the content and schedule of the system changes
- Increase the number of IS and client employees assigned to the CIS and RA systems
- Implement improved quality controls in the technical change management (i.e. testing group)
- Recognize that not all of the requests for changes can be done

#### IV. Next Steps

The Customer One team expects that these discussions on the definition of status quo will lead to a comparison of the short and long term benefits and implications of both the status quo option and the outsourcing option that was presented to ITSC and CPR in August. The next steps in this decision process have not yet been defined.

The assumption of a status quo or no-change approach to the customer information system seems inconsistent with the business changes that are occurring in the utilities industry. Nicor must weigh the value of investing in 30-year-old systems versus looking at building a foundation, which will support the business strategies:

- ability for the local distribution company to provide information consistently with reliability and accuracy
- emerging requirements for unbundling
- customer care initiatives

**Support Material:**

- The purpose of this portion of the document is to provide the background necessary to understand the status quo option and proposed approach in more detail. This includes the business drivers that we expect to impact our billing and customer systems over the next several years, as well as the technical components of maintaining and enhancing these legacy systems.

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**V. Vision**

The Customer One Management team sponsored by George Behrens, Rocco D'Alessandro and Barbara Zeller created the following vision narrative:

*As the utility industry is approaching significant competition and change, our ability to respond to changing conditions will be a key to sustain our competitive advantage. It is recognized that not all of our current customer care processes, systems and capabilities are prepared to respond to the requirements of our existing and potential customers, suppliers, and users of information (stakeholders).*

*The Customer One Project will provide the processes, systems, tools and access to information needed to ensure the company's ability to respond to customer's expectations and regulatory requirements in a timely and cost-effective manner. Stakeholders will obtain easy to use, understandable and accurate information as required.*

*We will accomplish this by leveraging our existing customer information system assets and internal capabilities, as well as deploying the tools and systems and utilizing external resources and capabilities necessary to meet current and anticipated requirements (ie. full unbundling).*

This vision still applies under a status quo approach. Nicor must ensure stability in its **current capabilities** to provide customer service, provide the **flexibility** to maintain a competitive advantage, fix the parts of **billing that "are broke"**, provide additional **customer care capabilities** where prudent, and ensure **access to critical business information**.

## VI. Technical Challenge

The complexity and rigidity of the billing systems continues to be a significant constraint and risk. As we have previously discussed, this code has been patched significantly over the past 30 years and the amount and complexity of change continues to increase. As we tried to demonstrate through the Jinga blocks, the programming code which executes business rules is intertwined in a complex means and needs to be pulled apart and repackaged to mitigate the risk of failure and the risk that coding for new business rules means.

**Patches: Patches:** To quantify, a review of the patches made to the program RA/120 in the RA system shows that over the past 30 years only 1.5% of the code has not been modified (and only 50% of the 1.5% is logic). Of the remaining 98.5% there is no way of identifying multiple modifications made to the same line of code. The program RA/120 is also growing from 10/97 to 10/98 it increased 15% in the number of lines of code from 30,910 to 35,340. From 10/98 to 9/99 there has been a 5% increase to 37,099 lines of code. We have a patch work quilt where we are no longer stitching on fabric but on other stitches.

The RA system was designed before the advent of inexpensive mass storage (both memory and disk) and many of its transaction record designs are based on 80 position punched cards or tape master file records designed to limit the usage of memory. Because of these limitations most of the changes have focused on the immediate need of regulatory or business change, with no or only a vague plan for what the system will eventually become.

**Billing Errors:** A further indication of risk is the various problems that have been encountered recently when 1) implementing new features or 2) attempting to manipulate the system in a way that wasn't originally intended; or 3) investigating an unusual situation. While a complete log, diagnosis and impact of each billing problem does not exist, several examples can demonstrate the issues we face. These billing errors can be categorized as "bugs", misunderstandings of how the system is designed to work, process errors, etc. (See appendix X for more detail)

### Architectural Constraints:

- The CIS/RA system foundation is based upon business rules developed over a 30 year period, data management technologies and application design. There are weaknesses that have developed which impact the ability to provide technical and business support.
- Tools and techniques can be utilized to statistically analyze the application code of the billing systems. This review can identify code that is most at risk of failure – unstructured in design, no longer utilized, multi-use fields and inconsistent references – all indications of potential risk. Proposals from outside vendors are being considered for this analysis. We believe, based on preliminary statistics that the billing system code is significantly impaired compared to these generally accepted IT standards.
- In addition, several architectural constraints have been identified by IT and confirmed by the business. These constraints will be remedied as part of the proposed plan.
  - Eg. Division/zone controls; meter reading books restricted by towns; "smart" account numbers.

**Technical Conclusion:** While not as reliable/robust as a replacement strategy, several techniques can assist in beginning to mitigate some of the complexities and risks identified above. Over the past several years, many shortcuts have been taken with the design and changes to the billing system, as it was anticipated that the system would be replaced. As a result, an investment and commitment must be made to stabilize the system and generate more reliability in its basic functions. These will be discussed further in Sections V – Stabilization.

## VII. Business Drivers

The ever-increasing changes in the business are resulting in a backlog of anticipated system requirements. This could be characterized as a gap between supply and demand. While each of these business drivers must stand on their own merit, a plan must be put in place to address the most likely justified and highest priority business requirements. These initiatives can be grouped as follows:

### DEREGULATION

**Customer Select:** Significant changes in the regulatory arena continue to require significant changes to the billing systems.

- The Customer Select pilot increases in size and complexity.
- Year 1 and Year 2 programming changes are still pending.
- Designs and workplans Year 3 requirements have been prepared.

While these changes are being incorporated currently into the billing system, as the volume of participation increases and new requirements are added, dedicated FTE's will be required to accommodate these changes in a reliable and maintainable form.

**Full Unbundling:** Several departments (IS, Rates, Billing, Customer Care) brainstormed on the scope of unbundling in an effort to pull together an estimate of effort. While the detailed requirements in a fully unbundled world are not yet clear, the Rate department (John Madziarczyk, Al Harms, and Koby Bailey) has identified four key requirements that can be expected to be required as we move through full unbundling:

- Transfer of a customer's contract to a new location;
- Year-round sign-up for unbundled customers;
- Additional storage options; and
- "Giving up the bill".

Certainly other components of full unbundling will become more apparent as deregulation evolves.

**Unbundling Volumes:** In addition, the Billing department has identified several unbundling-related enhancements. A fair amount of the effort is specific to higher transaction volumes, timeliness, and greater Supplier scrutiny. Some of the processes that in the past have been primarily an internal impact and only impacted Nicor Gas' efficiency and effectiveness, are now causing delays in timely usage information to the Suppliers resulting in an additional pressure to resolve issues quickly and accurately.

Generally, these requirements will provide for efficiency in processing, handling customer/supplier requirements, and tracking of open items. The current volume in the pilot has been manageable in a manual form for many components. However, as the volume continues to increase, these enhancements will be a necessity in providing timely and accurate billing to customers and suppliers. (See Appendix X for a list of unbundling enhancements)

### OTHER PROJECTS

**Customer Care:** Several identified projects are being proposed to provide new or enhanced capabilities in the billing/customer care systems. These include activities such as guaranteed appointments, improved meter reading reroute flexibility, BI enhancements, for example. A full list of potential projects is presented in Appendix X. These projects can be categorized in one or more of the following categories:

- Customer options
- Cost reduction (Charge-off)
- Efficiency improvements
  - Automation
  - Improved tracking
- Revenue generation
- Regulatory

**Backlog of MISR's:** An ever-increasing backlog of enhancements exists as well, and many potential backlog items remain undocumented, since a replacement of the systems was anticipated. In addition to the backlog generated by each of the departments, there are several recommendations by various committees including:

- Effectiveness Review Team (ERT) Billing Process review
- Billing Improvement Team recommendations

**Completed Projects:** A review of the projects completed over the past ten years provides a clear indication of a significantly changing environment. The illustration in Appendix X, shows:

- Increasing number of projects in recent years;
- Increasing size/complexity of the projects involved;
- Significant changes to the core architecture of the system (eg. Interfaces to externals);
- Single-threading of these large projects delayed other requirements from being addressed;
- Very little or no recovery/stabilization time was available to conclude many projects effectively.

In addition, recent project implementations have been completed with the expectation that the system would be replaced. As such, short cuts were taken on design, "fooled" the system to get it to perform certain functions, and the implementations were not as fully integrated as in the past.

**Business Driver Conclusions:** . It is reasonable to assume that the demand and complexity of projects will continue to increase. The volume of potential projects is overwhelming and would take years and millions of dollars to complete. Prioritization and commitment to a planning process will ensure that the projects with the highest value obtain priority. Consideration of resource expertise and project dependencies will also drive the project timelines. Bottom-line is – some things are going to have to wait!

#### VIII. What is "Status Quo"?

There are two options under a status quo scenario – 1) Do Nothing or 2) Limited Re-engineering. As indicated, in recent years the number and complexity of the projects have increased and this trend is expected to continue throughout the remaining life of these systems. The chosen option must provide Nicor with the ability to respond to ever-changing business and regulatory requirements over at least the next five years. The current legacy system complexity and interdependencies are causing an increasing number of "anomalies" with each new project/enhancement.

- The IT and Business Unit Leadership and staff recommend that Nicor Gas pursue "limited re-engineering"; proceeded by a "period of stabilization".

#### IX. "Do Nothing"

"Do Nothing" is defined as a continuation of the current work style – retrofitting the current legacy code with patches to facilitate the business and regulatory changes and resolving the most immediate fire(s). This scenario has a high risk of impacting the business unit and customers due to the complexity of the logic and the intricacies of the programming code. It will also limit the pace of system change. This scenario is not a viable option for the future. Under this scenario, it is believed our billing system will continue to degrade due to:

- 1) unfixed anomalies
- 2) less successful projects, not fully implemented
- 3) limited business and application documentation (outdated and not written down)
- 4) IT and Business knowledge gaps (including experts retiring)
- 5) Increasing complexity in business rules
- 6) Required speed of change

It should be noted that many of these are already occurring related to the Customer Select implementation.

## X. Stabilization and Catch-up

At this time it is necessary to stabilize the people, process, and systems. Stabilization will involve the following (*Note: the "do nothing" areas addressed by stabilization are cross-referenced*):

- Fixing the existing incomplete processes that are not working correctly. (Bill design, restructuring, address cleanup, etc.) We have implemented a ton of changes in the last couple of years and all of them need attention. Leaving these in an incomplete state has introduced other exceptions that the IS staff spends time chasing down. (*Refers to item 2*)
- Fixing the known exceptions. (*Refers to item 1*)
- Remove unnecessary complexity by cleaning up obsolete programming logic, data fields, etc. (*Refers to item 1*)
- Document the current application and business processes to facilitate both IS and business knowledge transfer. Devise an ongoing training plan to keep the application and business staff current. Bring the current system to a level that could be supported by an interchangeable IS and business support staff. (*Refers to items 3 & 4*)
- Developing an "application" help desk process to funnel calls, track/highlight problems (both training and application) and solutions, and leverage documentation. (*Refers to item 4*)
- Develop an improved quality assurance and testing process for effective maintenance/enhancement implementation (*Refers to item 2*)

See appendix X for a more complete list of stabilization activities.

## XI. Limited Re-engineering

Limited re-engineering is defined as restructuring the current legacy programs to directly support priority projects and business requirements. The objective of re-engineering is to:

- increase maintainability/flexibility,
- eliminate some application architecture constraints limiting business capabilities, and
- create effective development processes to increase quality,
- improve billing accuracy, and
- improve business processes.

The complexity of new projects dictates the need to "re-engineer the key business components". This scenario will lay the foundation for enabling the IT Support staff to implement additional functionality more quickly (not single-thread) and with a lower risk of causing programming "exceptions", which will impact the business units and customers. We recommend this option be preceded with a period of stabilization to increase customer (internal/external) satisfaction by minimizing the impacts. From a status quo perspective, this is similar to what have done in the past with the Special Billing (SB) system, which provided the Gas Transportation Department a stabilized base system to build upon.

Re-engineering will address the following major components:

- Modularize the billing system to reduce complexity and bottlenecks where feasible
- Streamline/tune several high maintenance processes (cancel & rebills, order processing, billing investigations, re-routes, get reads, recent credit enhancements, and address verification)
- Add credit flexibility via parameterization of critical credit features (credit cycle, credit messages)

These enhancements will be staged such that we implement those that provide the foundation to unbundling first, so that unbundling can get underway as early as possible. Other re-engineering components will be staged based on the priority of the project driving such a change. See appendix X for a more complete list of re-engineering activities.

## XII. Resources/Timelines/Costs

There is going to be a difficult to manage balance between time, effort and resources. Much of the pending work is time sensitive and the sooner we complete it the better. On the other hand the amount of pending work is extensive and must be spread out – due to the complex and intertwined nature of the application code and the lack of available/knowledgeable resources.. Lastly, the ability to get large numbers of people up to speed effectively is difficult, whether they are added staff or contractors. Balancing these three components will be the most significant challenge. The estimates and timelines provided will be high level, of course. However, we recognize the need to absolutely deliver unbundling commitments on schedule.

The timeline in Appendix X illustrates the proposed work plan. As shown, there is some overlap between stabilization, re-engineering and unbundling. The following summarizes the key components of each phase:

	Average FTE's	Quarters Duration	(millions) Cost	Quarters Start Date
Stabilization	7	4	\$1.6	4/99
Limited Re-engineering	15	8	\$6.4	2/00
Unbundling	6	6	\$2.4	1/01
Other Projects	tbd			1/02

In addition, some minor level of work can proceed throughout these phases as agreed upon. However, most of the pending project work should be delayed until completion of the limited re-engineering phase.

(Additional material is still being prepared)

## XIII. Next Steps

To summarize, if status quo is the selected alternative, the team proposes the following:

- Stabilization period should commence immediately
- Secure additional IS and client resources assigned to the billing systems
- Continue with Customer Select Year 3 requirements
- A governing council should be established to prioritize and schedule all system-related work
- Plan for and implement a re-engineering phase in support of the highest priority projects
- Complete required Unbundling components following re-engineering

The success of this approach will depend on:

- Control of the scope of each phase
- Ability to secure skilled resources in a timely manner
- Commitment to prioritization and planning
- Commitment to improved quality control process
- Significant client and IS involvement in all aspects
- Tracking and resolving problems quickly

The window of opportunity is closing quickly. We must proceed with a committed path in order to effectively support unbundling and to begin to meet the backlog of demand for improved customer care. The IS and business unit leadership and staff believe that this approach, while clearly a short-term fix, is a workable one which can allow Nicor to meet unbundling requirements and stabilize the system to better manage ongoing system changes. It is further recommended that if a decision is made to follow the status quo approach at this time, that a review of system replacement alternatives be revisited in 2002.

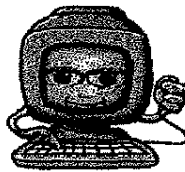


**APPENDICES:**

Vision Statement  
Billing Errors Summaries  
Unbundling Enhancements  
Customer Care Projects  
Completed Projects Graph  
Stabilization Details  
Limited Re-engineering Details  
Timelines  
Costs

# CCISP

**Customer Care Information Systems Project**



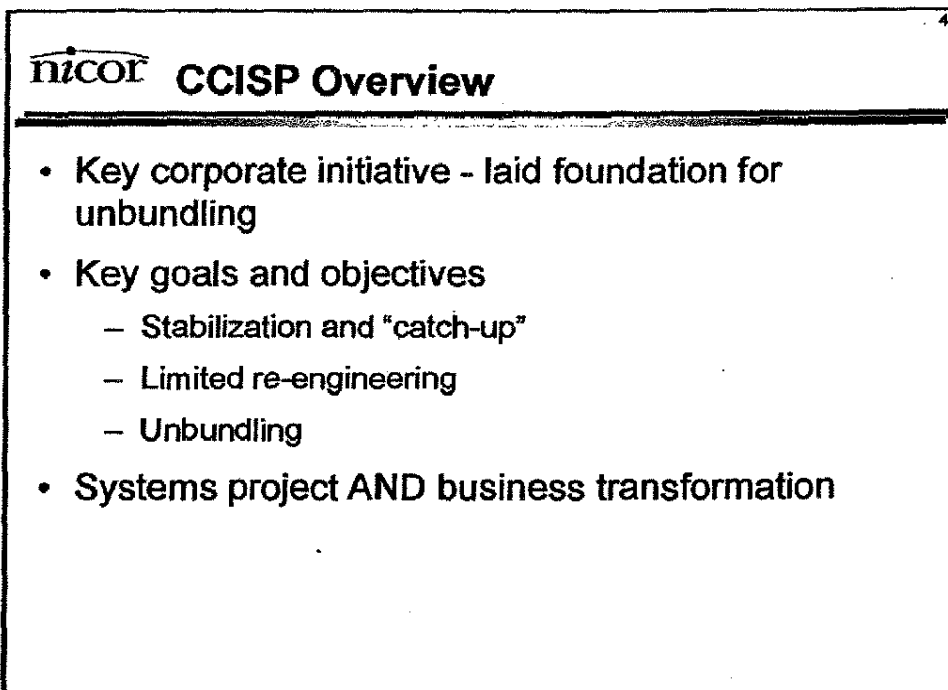
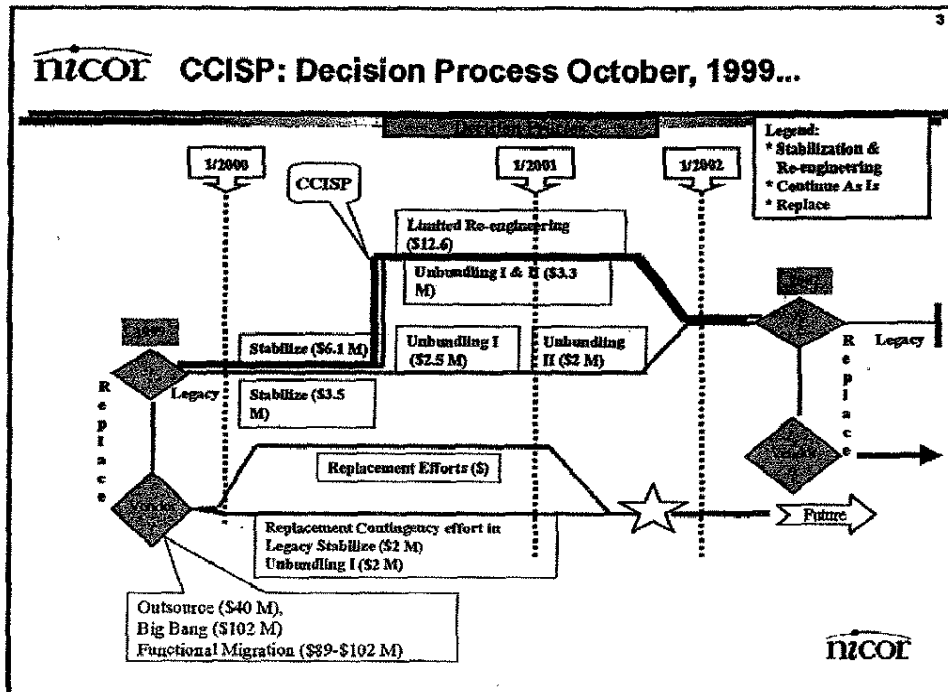
**Officer Presentation  
April 9, 2002**

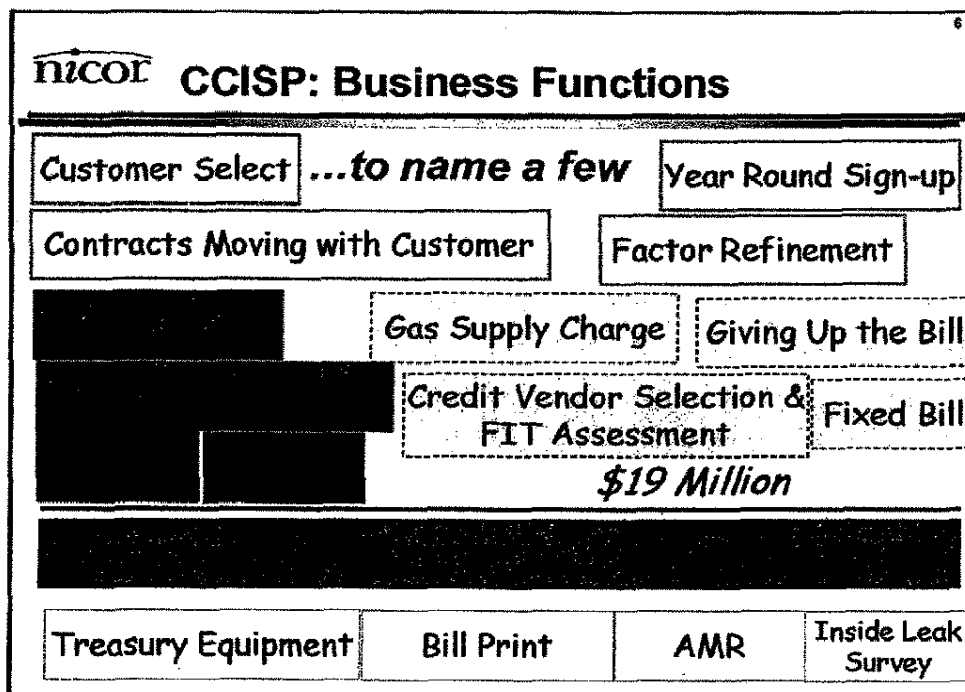
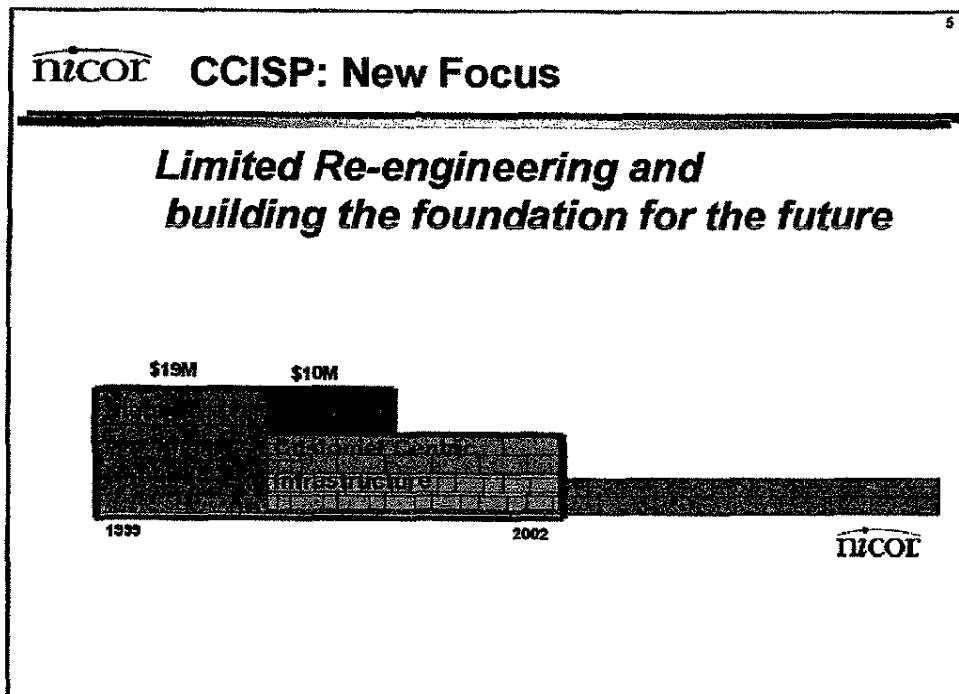


## **CCISP: The Journey**

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- How we got here
- Benefits and Takeaways
- Next Steps





## **CCISP: Key Results**

- Compliance
- Additional functionality (Budget Plan, Fixed Bill, Factor Refinement)
- Solution Development Life Cycle (SDLC)
- Quality Assurance & Software Configuration Mgmt.
- System Test (environment, methodology)
- Decision to implement Credit package
- Correcting Mailing Addresses

## **CCISP: "Soft" Benefits**

- Model Processes for other large business projects
- Cross-business unit communication and teamwork
  - Sponsor team
  - Customer Care Council
  - Change Network
- IS Transformation
- Business & IS partnership
- Vendor Relationship Management



## CCISP: Lessons Learned

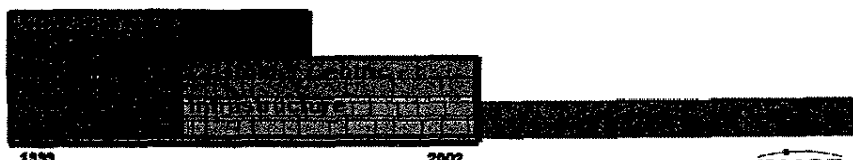
- Methodology is key - for all project areas (project management, change management)
- Involve business throughout the project to ensure requirements are gathered, understood and achieved
- Importance of system testing
- Prioritizing needs and requirements across ALL business units
- Change Management is critical - complexity of changes continue to increase



## CCISP: What's Next

### Building on the foundation:

- Wrap-up Unbundling Support
- CIS Strategy - Continue Functional Migration
- E-Care Initiatives
- Integration with other replacement projects



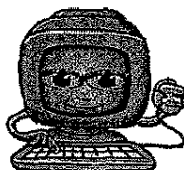
1999

2002



# CCISP

**Customer Care Information Systems Project**




**Officer Presentation  
April 9, 2002**

Here to bring closure to the largest IT project in Nicor's history.

I saw Phil walking into the building a couple weeks ago - he had just read our quarterly newsletter indicating that CCISP was coming to an end. It was hard to believe we were using those words. But we are.

As a sponsor team we felt it was worth bring this group to celebrate our success and acknowledge our learnings.

 **CCISP: The Journey**

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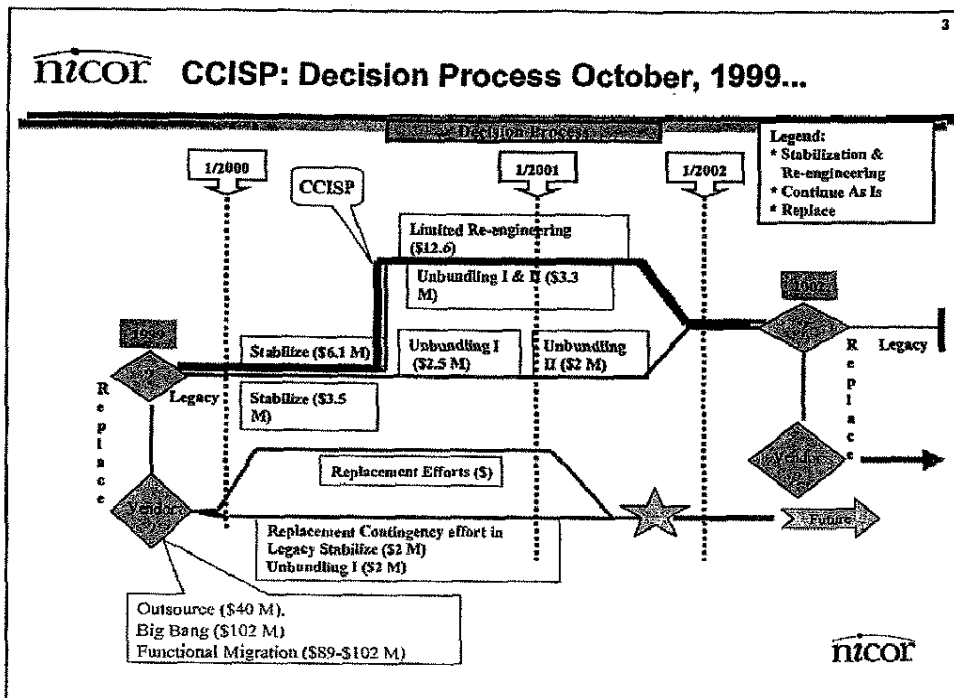
- How we got here
- Benefits and Takeaways
- Next Steps

To do this I will remind us how we got here - from the beginning decision.

I will also try and articulate the key takeaways that CCISP provided the business. Both the expected and the unexpected.

Last I will briefly set the stage what might be next.





First, revisit how we got to this point with CCISP and the Billing applications.

In October 1999 faced decision

Consider outsource, functional migration, continue as is.

**STAKE IN THE GROUND - Redline** - As we all remember, our business decision at that time aligned efforts to stabilize and re-engineer the billing system in order to meet the requirements of unbundling portrayed as \$20-30 million effort.

## CCISP Overview

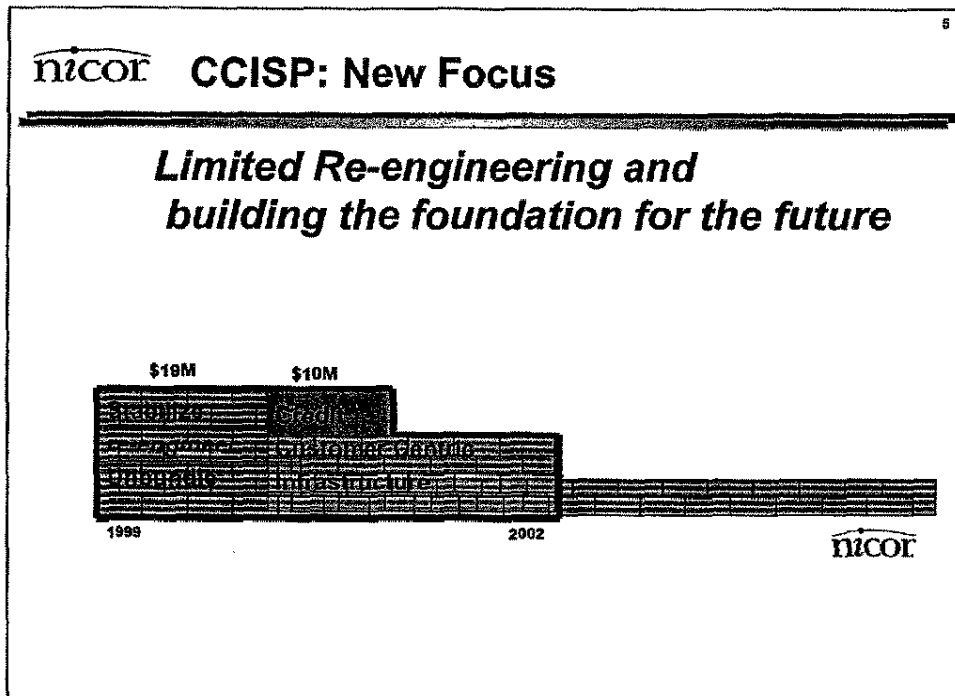
- Key corporate initiative - laid foundation for unbundling
- Key goals and objectives
  - Stabilization and "catch-up"
  - Limited re-engineering
  - Unbundling
- Systems project AND business transformation

Key to success would be **meeting the requirements of unbundling.**

**Stabilization** was required due to the approach taken during the Customer/1 days - many items were left in a half done state assuming the legacy system would go away. **Bugs needed fixing.** Enhance some business processes.

**Limited Re-engineering** meant that we did not intend to overhaul the internal architecture of the legacy system to meet future business needs. We felt that investing in the legacy systems was not a good long-term strategy. It was merely necessary to support the short-term unbundling requirements. **Any re-engineering was intended to remove bottlenecks or enable future replacement efforts.**

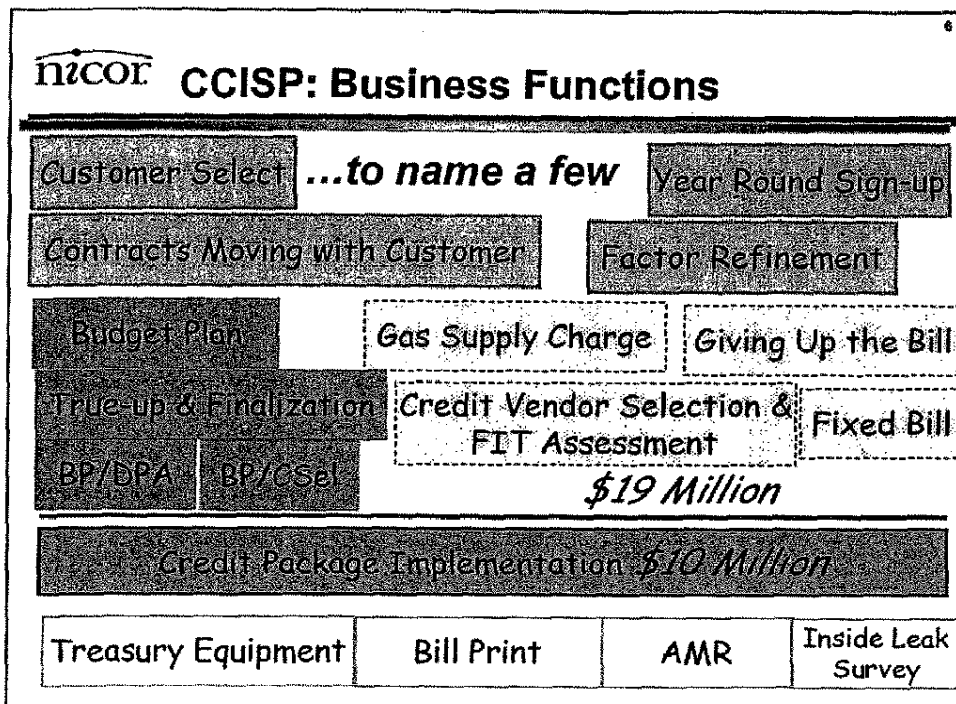
We also recognized the need for IS and the Customer Care organization to better prepare itself to **meet the challenges of ever-increasing business changes** and the expected replacement of significant portions of CIS/billing in the future.



The SRU part of the project will be completed for less than \$19 million, \$1 MM less than currently approved by the board. 1st - we **deferred** the completion of over 35,000 hours of work on the legacy system that would not be a wise investment at this time. Second, the portions related to **re-engineering the credit system would not be needed** as we decided to replace it with a package.

As a result, we **searched for a package** that could meet our credit business requirements. We selected a vendor, SPL WorldGroup, that can support these credit requirements and **provide additional future capabilities**. We secured a **fixed bid** with Accenture for this implementation.

This implementation includes the loading of **all 2 million customers** and provides a strong foundation of infrastructure in order to proceed with additional portions of this CIS package if deemed appropriate.



So what did we get?

The portion in **yellow** represents those business requirements that were identified in the **original CCISP plan**. The portion in **Bright Blue** ID's the **budget Plan** implementation - a total of 7 phases over a 15 month period. This was not in our original plan. We also completed other **new components in light blue**. Most of the additions were **driven by external forces**.

All of these pieces were completed for less than \$19 Million.

The **bottom portion** represents those projects that were **funded separately**, but yet utilized most of the project management and change infrastructure established by CCISP.



## CCISP: Key Results

- Compliance
- Additional functionality (Budget Plan, Fixed Bill, Factor Refinement)
- Solution Development Life Cycle (SDLC)
- Quality Assurance & Software Configuration Mgmt.
- System Test (environment, methodology)
- Decision to implement Credit package
- Correcting Mailing Addresses

As a result of CCISP we have been successful in complying with various external requirements, while adding new capabilities to our 30 year old system.

Probably more importantly we have **added new capabilities** to our application development portfolio. **Tools and techniques** that can be reused on many pothor projects.

With our partner **Keane Inc**, we created and implemented an appropriate SDLC - utilizing **best practices from the Software Engineering Institute** and modeling it in Nicor's environment. We moved our capabilities from a level 0 or 1 to somewhere between level 2 and 3 on the SEI scale.

We also invested nearly **\$2 million dollars in our testing environment and tools**. This proved invaluable in the past three months as we made more complex changes to our billing engine than probably ever before attempted. This environment is key to the credit project too.

While these are good statistics - what matters is that we have been able to **put things into production nearly error free**. Kevin's comment....

Mail address - identified several million dollars in undelivered bills/revenue - **fixed system issues and significantly improved tracking** and correction as needed.



## CCISP: "Soft" Benefits

- Model Processes for other large business projects
- Cross-business unit communication and teamwork
  - Sponsor team
  - Customer Care Council
  - Change Network
- IS Transformation
- Business & IS partnership
- Vendor Relationship Management

- As I already stated, we have used the methodology for several other projects, **including BOFT** in Distribution Services.

- **Next three go together** - improved working across the team. IS moved to a project delivery model. The business stepped up to take more ownership of requirements, testing, and change management.

-Vendor management - establishing clearer expectations with a package vendor to ensure long term viability and reliability.




## CCISP: Lessons Learned

- Methodology is key - for all project areas (project management, change management)
- Involve business throughout the project to ensure requirements are gathered, understood and achieved
- Importance of system testing
- Prioritizing needs and requirements across ALL business units
- Change Management is critical - complexity of changes continue to increase

Prioritization was key. CCC. Behavior change in business and IT, starting at the leadership level.

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## CCISP: What's Next

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**Building on the foundation:**

- Wrap-up Unbundling Support
- CIS Strategy - Continue Functional Migration
- E-Care Initiatives
- Integration with other replacement projects





Where do we go from here?

Unbundle - LIHEAP, Fixed Bill II, Give up bill II, etc.

Opportunity to incorporate all or most of SPL product as part of a CIS/Billing migration strategy. The key is to build a **compelling business case** for investments along this path. Our research to date would indicate that the SPL product can meet much of our requirements - in fact we believe that incorporation of budget plan and fixed bill would have been very straight forward (unlike what we had to do to the legacy system).

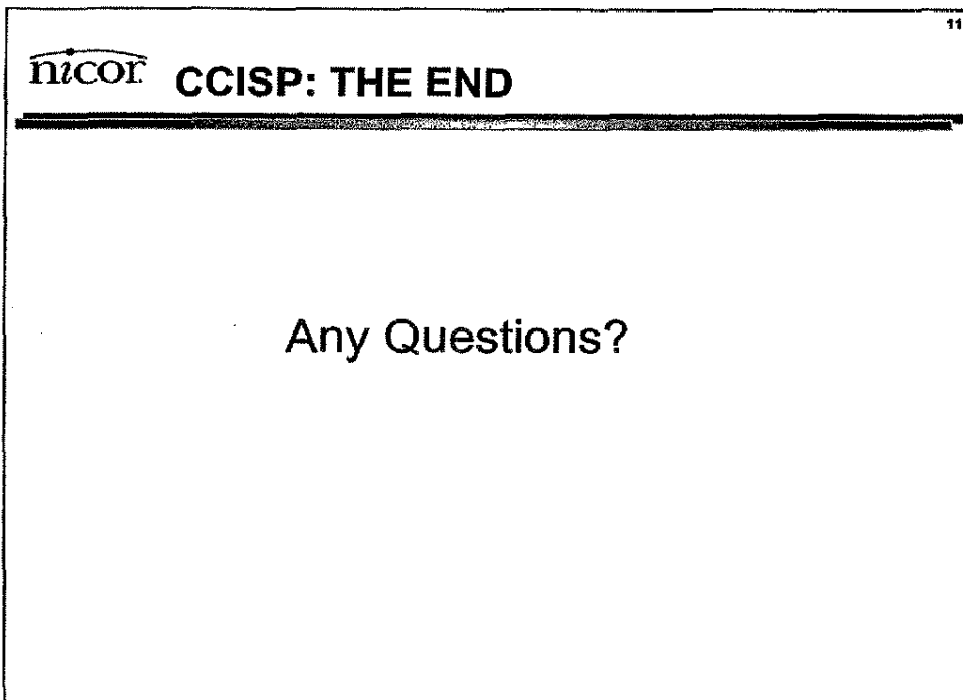
Having loaded all 2 million customers, the SPL product and its partners **could naturally support E-care** initiatives with some investment. This strategy will make more sense if we intend to further implement the SPL package.

Likewise **if we look at upgrades to CAD, ITRON, etc.**, the SPL modules that support these applications would be considered at that time.

**The most costly and risky component to replace is the core billing engine.** And while we appeared successful in delivering items such as budget plan, fixed bill, etc. **Our 30 year old billing engine is more complex and less stable than it was when we started CCISP in 1999.** Our methodologies have saved us. We will have our work cut out for us in building the business case in this area.

In conclusion, we should feel good about the functionality and capabilities delivered thru the efforts of CCISP. And look forward to the future as we continue to improve our IT systems. Thank BZ, RD, GB.





To do this I will remind us how we got here - from the beginning decision.

I will also try and articulate the key take aways that CCISP provided the business. Both the expected and the unexpected.

Last I will briefly set the stage what might be next.